

PROJECT DESCRIPTION

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT MD 924 (MAIN STREET) AND COURTLAND PLACE IN HARFORD COUNTY. THE SIGNAL WILL BE RECONSTRUCTED IN ONE PHASE. MD 924 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION. INTERSECTION OPERATION  
1. NORMAL OPERATION  
THE INTERSECTION WILL OPERATE IN A TWO PHASE, SEMI-ACTUATED MODE.

CONTROLLER REQUIREMENTS:

AN NEW FULLY-TRAFFIC - ACTUATED - EIGHT- PHASE TRAFFIC SIGNAL CONTROLLER IN A POLE - MOUNTED SYSTEM READY CABINET WILL BE INSTALLED AT THIS LOCATION.

SPECIAL NOTE:

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
971016	816	- 1 EA	FURNISH NEMA PHASE 5 (FULLY ACTUATED CONTROLLER AND STRETCH POLE MOUNTED CABINET)
973023	813	49.34 S.F.	FURNISH SHEET ALUMINUM SIGNS
		- 2 EA	D3-2 SIGN 96"x16"
		- 1 EA	R3-1 SIGN 30"x30"
		- 2 EA	R5-1 SIGN 30"x30"
		- 1 EA	R3-2 SIGN 30"x30"
		- 4 EA	R10-4 SIGN 9"x12"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
585621	SP-555	225 L.F.	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)
585625	SP-555	40 L.F.	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE)
120500	104	L.S.	MAINTENANCE OF TRAFFIC
203030	205	10 C.Y.	TEST PIT EXCAVATION
837001	804	7 EA.	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIA. X 10 FT. LENGTH.
860272	814	12 EA.	FURNISH AND INSTALL 12 IN. L.E.D. VEHICULAR TRAFFIC SIGNAL HEAD SECTION BLACK FACED
861105	810	285 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG).
861116	810	200 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG).
861107	810	760 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG).
861108	810	185 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG).
816001	816	1 EA.	FURNISH AND INSTALL VIDEO DETECTION CAMERA.
816005	816	1 EA.	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE.
816015	816	1 EA.	FURNISH AND INSTALL VIDEO INTERFACE FOR DETECTION SYSTEM.
811001	811	4 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE.
805140	805	80 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805135	805	60 L.F.	FURNISH AND INSTALL 3 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805155	805	160 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - SLOTTED.
818004	818	1 EA.	FURNISH AND INSTALL 10 FT BREAKAWAY PEDESTAL POLE.
818030	818	2 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE W 38 FT MAST ARM
818004	810	5 EA.	FURNISH AND INSTALL 10 FT BREAKAWAY STEEL PUSH BUTTON PED POLE (4 IN. SCHEDULE 40 PIPE).
801004	801	8.65 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	810	220 L.F.	FURNISH AND INSTALL STRANDARD BARE COPPER GROUND WIRE (NO. 6 AWG)
801117	810	80 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 WIRE NO. 4 AWG THHN/THWN
860292		1 EA.	CUT CLEAN, GALVANIZE AND CAP SIGNAL STRUCTURE
805125	805	60 L.F.	FURNISH AND INSTALL 2 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
813014	813	15.50 S.F.	INSTALL GROUND MOUNTED SIGN.
813015	813	33.84 S.F.	INSTALL OVERHEAD SIGN.
831010	806	1 EA.	FURNISH AND INSTALL 250 WATT HPS LAMP AND LUMINAIRE
871201	805	1 EA.	INSTALL CONTROLLER AND CABINET - POLE MOUNTED
866101	806	1 EA.	FURNISH AND INSTALL 10 FT. LIGHTING ARM ON SIGNAL STRUCTURE
807202	807	1 EA.	FURNISH AND INSTALL METERED SERVICE PEDESTAL.
800000		8 EA.	FURNISH AND INSTALL 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD (PAINTED BLACK)
800000		1 EA.	FURNISH AND INSTALL TWO WIRE CONTROL UNIT.
800000		8 EA.	FURNISH AND INSTALL AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON STATION AND SIGN.
800000		1 EA.	FURNISH AND INSTALL GLASS HEAD LUMINAIRE.
800000		1 EA.	FURNISH AND INSTALL 10 FT. LIGHTING ARM FOR STEEL LIGHTING POLE.
800000		1 EA.	FURNISH AND INSTALL 30 FT. ROUND STEEL POLE FOR LIGHTING.
873001		L.S.	REMOVE AND SALVAGE EXISTING EQUIPMENT
800000		L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL / EQUIPMENT

C. SHA FORCES TO REMOVE CONTROLLER AND ALL AUXILIARY EQUIPMENT. CONTROLLER CABINET, EXISTING SIGNAL POLES, SIGNAL HEADS, HAND BOXES AND ALL OTHER EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

QUANTITY	DESCRIPTION
1 EA.	POLE MOUNTED CABINET.

MD 924 (MAIN ST)

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MS. ERIN KUHN  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-2781

MR. STEVE MARCISZEWSKI  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-2761

MR. DONALD SCHAEFER  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (410) 321-2821

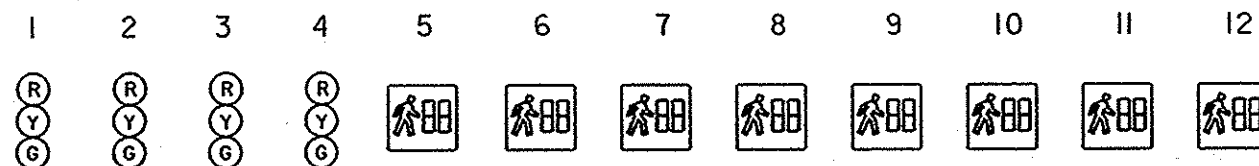
MR. MIKE PASQUARIELLO  
UTILITY ENGINEER  
PHONE: (410) 321-2841

MR. EDWARD RODENHIZER  
MANAGER, SIGNAL OPERATIONS SECTION  
PHONE: (410) 787-7652

MR. RICHARD DUFF  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

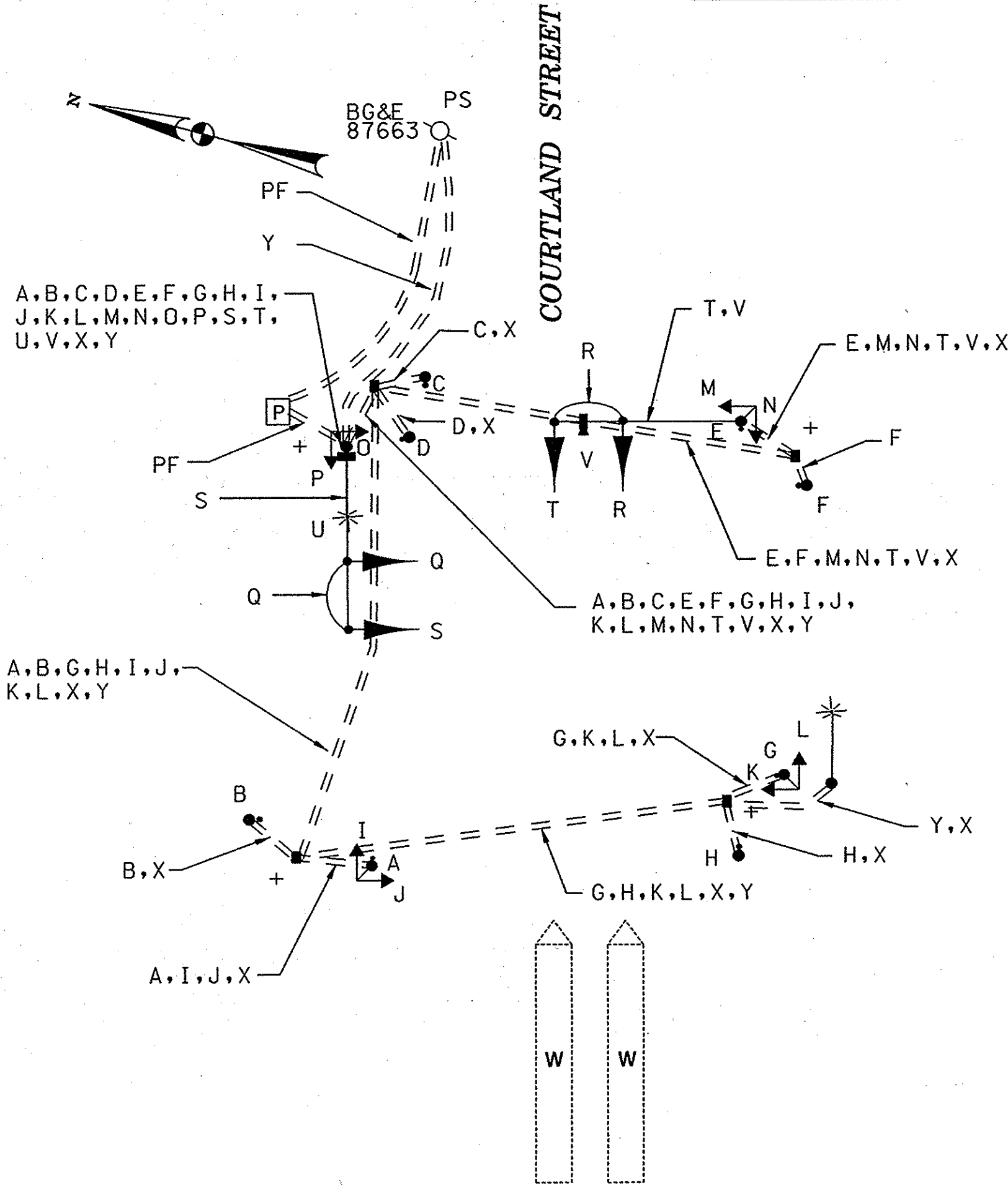


72 Loveton Circle Baltimore, Maryland 21152-0949



PHASE	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 2	G	G	R	R	W	W	W	W	DW	DW	DW	DW
PED CLEAR	G	G	R	R	FL/DW*	FL/DW*	FL/DW*	FL/DW*	DW	DW	DW	DW
PHASE 2 CHANGE	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	G	G	DW	DW	DW	DW	W	W	W	W
PED CLEAR	R	R	G	G	DW	DW	DW	DW	FL/DW*	FL/DW*	FL/DW*	FL/DW*
PHASE 4 ALT CHANGE	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A-H) 2-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
- I-R) 5-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
- S-T) 7-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
- U, Y) 2-CONDUCTOR TREY CABLE (NO.12 A.W.G.)
- V ) VIDEO CABLE FOR CAMERA
- W ) VIDEO DETECTION ZONE
- X ) STRANDED BARE COPPER GROUND WIRE (NO.6 A.W.G.)
- Y ) UNDERGROUND PHONE LINE
- PF - POWER FEED 3-CONDUCTOR (NO.4 AWG)
- PS - POWER SOURCE
- + - 3/4 IN. x 10 FT. GROUND ROD



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 924 (MAIN ST.) STREETSCAPE IMPROVEMENTS  
FROM MD 22 (FULFORD AVE.) TO GORDON ST.  
(DESIGN BUILD)

MD 924 (MAIN ST) @ COURTLAND ST.

SCALE NO SCALE DATE 10-11-78 CONTRACT NO. H-757-501-485

DESIGNED BY H. KILAN COUNTY HARFORD  
DRAWN BY H. KILAN LOGMILE 121492405.59  
CHECKED BY H. KILAN T.I.M.S. NO. G-985  
F.A.P. NO. M-005 (17) TOD NO. 12024

DRAWING NO. TS - 08 OF 14 SHEET NO. 09 OF 15